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Issues in Tertiary Education

The issues in tertiary education are multiple and indeed, some of them are no different to the ones in other educational institutions. They affect KwaZulu-Natal as they do all the other provinces, but perhaps we feel the urgency for their resolution more keenly in this province because we are so painfully aware of the proportionally larger backlogs to be addressed. I shall spend a small amount of time outlining the more obvious ones, and then move on to describe the less obvious issues which are considerably more complex and difficult to address.

Financial sustainability

All institutions in the tertiary sector are finding it impossible to run their operations with the funding presently available to them. The most pressing concern is the number of students who are totally without financial support. In any system where education is not free, this is a problem. In South Africa, trying to overcome a history of deprivation, it is exacerbated. We have to find a way of funding students. Individual universities and other institutions cannot possibly solve the problem of so-called 'financial exclusion' on their own. The establishment of an adequate national student loan fund is probably one of the single most significant actions to promote access and avoid financial disaster and major disenchantment in individual institutions. We should be lobbying wherever it is possible for us to do so, to make sure it is established as quickly as possible. This is not as difficult as it would first appear. The Tertiary Education Fund of South Africa (TEFSA) set up by the Independent Development Trust is operating effectively and has in place all the necessary procedures as well as staff trained in their administration. It simply means that more funds need to be given to it, and there are several overseas agencies ready to do this. The issue then will be whether the amounts available will be large enough to solve the problem, and if they are not, how priorities are to be determined.

It follows therefore that it is not helpful to support moratoriums either on fee increases or on so-called 'financial exclusions'. Fee increases are forced on universities which wish to avoid deficit budgeting. Where there is no sanction at all on students who do not pay their fees, there is no incentive whatever to pay. This applies even to those who have bursary or loan support. In the face of inflation and in the absence of an educational system which is free, there is no way that a blanket moratorium on fee increases and 'financial exclusions' is practicable.

Access

Improving access includes a whole range of possibilities. We need to rely even less on the matric results as an indication of potential, and concentrate on the whole range of alternative selection programmes. We know that a lot of research has been done in this area and it is time we stood back from our pet projects and do some evaluation. We cannot afford for resources to be used in isolation, we need to recognise that we share this problem and we should share our successes in this field. If fierce competitors like IBM and Apple can embark on joint ventures, then I think we can as well. I must add that improving access should include recognition of life experience, a recognition which is given in many reputable institutions in other parts of the world.

We also need to use the resources we have more fully: this will mean more part-time classes, more short courses, summer and winter schools with credit-earning courses, possibly a third semester, more adult education, and perhaps most important of all, more distance education. All these help to increase access in an emergency situation, speed up the educational process, contribute to the concept of lifelong learning, and assist in re-training and re-education. They also have the additional bonus of maximising the use of resources, both physical and human.

Again, we are fortunate that we do not have to 'reinvent the wheel'. Many countries have battled with this problem of access and formulated some very successful models. In the Netherlands, for example, there is an open distance learning university which operates with 200 staff members and has 60 000 students. The preparation of material is contracted out to some of the best academics in the world and the quality of the learning is acknowledged as very good indeed. There are other examples of countries with problems not too different to our own, and we should not be persuaded that we are so unique that there is no model in the world that will fit our circumstances well enough.

There are other matters which will assist. For example, we need more flexible degree structures so that students can move in and out of the system as their finances allow. We need an education system which promotes mobility from one institution to another and where there is a system which works to form bridges for students from one institution to another, even from one level of institution to another, that is, from technikons to universities and vice versa.

In this context, I am reminded of an action (what I would call an 'affirmative action') taken by the University of the Witwatersrand after the Second World War. They made all sorts of accommodations for returning soldiers. They perceived a crisis and they acted accordingly. Ladies and gentlemen, we too are in crisis — a crisis of quite different proportions to that of the mid-forties. Extraordinary times call for extraordinary measures, and improving access must be achieved by every way we can imagine. Our country and our people will be immeasurably enriched in the long term by such efforts. I would even go so far as to say that our survival as a quality system depends upon it.

Standards

The third issue, which exists in some people's minds, is that of standards. It is helpful here to distinguish between entry standards and exit standards. All sorts of flexibility has been introduced into the entry standards and this is necessary in the situation where we are unable to use matriculation results as a predictor, and the comments already made about access are relevant. It is not, however, in

anyone's interest for exit standards to be lowered, nor indeed have I met anyone who argues otherwise. What we must be careful about is labelling something as a quality product just because it is part of the present system. There are many aspects of the present system which should not be defended on grounds of quality and should be dealt with appropriately. We cannot afford them. I shall return to this later.

Governance

The new order, quite rightly, places a high value on democratic procedures being used in the process of governing institutions. Business organisations have long recognised the importance of participative management and I do not see this as very different. The question of staffing institutions to represent the demography of our country is part of this issue but the question of governance goes much deeper than that. There may well be a number of black people and women on the staff of a previously white establishment, but the question is: have they the opportunity to make any significant difference to the decisions which affect the life of that organisation? If they have not, then there are some important matters which must be acknowledged. The first is that the practice of so-called affirmative action is then cosmetic and in the end will fail, adding to the long list of similar failures elsewhere, just another example of history repeating itself, mankind unwilling to learn from past mistakes. The tragedy is, of course, not just that as a country and a nation we cannot afford such mistakes, it is also a record of personal tragedy — individuals who came in all good faith into a system where they expected to be judged on merit and found only prejudice and ultimately, disillusionment.

The second matter which must be acknowledged is the awful waste of skills which could make the system so much better. There is no question that the experience and perceptions which black people and women bring to the organisation will vastly improve the quality of that organisation and its governance. An institution in which all population elements work well must include in its planning and other decision-making teams 'black colleagues who are respected as the indispensable experts that they are. They are the only people who have the background experience to help structure (for example) proper affirmative action. Similarly, the experience of women is essential to an organisation which needs to cope with the modern world.' (Margaret Legum in *Die Suid Afrikaan*). Both men and women bring qualities which are essential for today's fast-changing world where human relations are crucial to success. The brutal truth is that the inclusion of black people and women in the decision making structures (that is, in the governance) of the universities and other places of higher education, will actually raise standards, not lower them — a theory somewhat contrary to popular belief. Julian Sonn writing in *Die Suid Afrikaan* maintains that 'a major part of our personal liberation will have to be the acceptance of our African, European and Asian heritage. This process can be facilitated by extensive discussion of cultural, world view and ethos differences and similarities so that all these differences [and similarities] can be recognised and understood. In fact, the process of knowing these differences [and similarities] leads to a genuine appreciation of the contributions that all employees can make to enhance the effectiveness and productivity of the organisation'.

I agree with Mala Singh when she writes that affirmative action is about 'generating large-scale educational opportunities rather than about targeting a

select group of individuals for advancement; it is about overall democratisation and the transformation of institutional and organisational culture rather than including a few more individuals in decision-making . . . , (it) is not only about the implementation of a different, more equitable principle of distribution but about how such principles are chosen, by whom and with what outcomes'. In the end it is essentially about governance and it is why students and others talk about such matters as questions of what they call 'transformation'.

'Less obvious issues'

I turn now to my fifth and final point — a point I previously labelled as containing 'less obvious' issues. These issues are concerned with changes in curricula — what we at the University of Natal have identified as a fundamental strategic initiative of the University and that is curriculum reform. It is necessary to break this topic down into several parts.

It is important that tertiary educational institutions examine their programmes and curricula and ask themselves whether at least some of those programmes and curricula are sufficiently focused to produce the type of graduate who will effectively contribute to the national agenda of reconstruction and development. I would argue that, in general, they do not.

So far, tertiary education has concentrated on producing graduates who are destined (by and large) for the first-world sector of our economy, and the private sector at that. I acknowledge that the demands of the corporate world and the professions must be met and this is a necessary and worthy activity that must continue. This is not at issue at all. However, what must be also realised is that there is another demand which is not being met. This is from a different market in the public, small business and informal sectors, sectors which include non-government organisations, community-based organisations and the like. Indeed, it is in these areas that more jobs will be generated than in the corporate and professional world. Big business in the last decade has, in fact, shed jobs. It is in these areas that we find the problems of a developing society and we need to produce excellent graduates capable of addressing them and providing informed leadership. We also need to recognise that, for the foreseeable future at least, tertiary education institutions are the only organisations which indeed have the capacity to provide the education required to meet this need.

Addressing the problems of development and indeed the transformation of the public sector will bring some very different and difficult realities to the design of programmes and curricula. The first of these is what Capra describes as 'the beginning of a fundamental change of world view in science and society, a change as radical as the Copernican Revolution . . . The more we study the major problems of our time, the more we come to realise that they cannot be understood in isolation. They are systemic problems — interconnected and interdependent . . . The emerging new paradigm may be called a 'holistic' world view, seeing the world as an integrated whole rather than a dissociated collection of parts.' The new paradigm has profound consequences. Over the last three hundred years the curriculum has been organised largely in terms of disciplines. This promotes the 'old paradigm', the tendency to view the world of nature, life and work as segmented, differentiated into parts. Curricula and research design need to be organised in such a way that scholars are produced who go beyond the isolated facts, who make connections across disciplines, who help shape a more coherent view of knowledge and a more integrated and authentic view of life.

The academic world has already responded somewhat through the development of a new range of hyphenated disciplines like bio-engineering and psycho-linguistics and a host of others. This is becoming more and more evident in collaborative research work across disciplines. Nowhere is this truer than in development work like health care, economics, social, education and housing. After all, problems in the real world are seldom so kind as to divide themselves into disciplines. It will be the responsibility of the institutions to create ways of fostering these connections, promoting systemic thinking and facilitating interdisciplinary studies, and I am happy to report that the University of Natal is doing exactly that.

Transformation is also concerned with what has been traditionally taught and even with how the teaching process is conducted. Changing curricula is perhaps a transformation rather easier to achieve than the others. Universities in South Africa must confess to being, at least until fairly recently, very Eurocentric in their approach. Examples abound. We had French and German departments long before we had Zulu or any other African language departments. We taught English and European history long before we taught (or researched) any African history. Architectural students were given assignments that had everything to do with first-world concerns and nothing to do with the concerns of the very people they were supposed to be serving.

It must be quite clear that we are not talking about 'standards' here. It is no more difficult to study Jane Austen than Es'kia Mphahlele. Whatever the content of the curricula, whatever process we use, indeed whatever we do, we are obliged to do it well. What we are talking about here is the issues we address in our universities and indeed how we teach. Our schooling system in general does not encourage intellectual abstraction, lateral thinking and analytical synthesising. This requires new teaching methods which are relevant to the cognitive framework of the students, it requires some major adaptation which recognises that. We also need to acknowledge that, distance education apart, the education that goes on at any tertiary institution does not all take place in the lecture theatre or laboratory. The cultural and sporting life, the leisure and other facilities all add up to total experience — as indeed they do in a school environment. If students come to university but feel alienated, do not mix except with those other students whose background they share, the opportunity for learning is radically reduced. Again I believe it is part of our responsibility, part of an affirmative action, to assist in creating a more cohesive student body which mixes socially across racial and gender divides and maximises the opportunity that university life offers.

There is a further and very significant and dramatic change which has taken place in education circles. It springs from an understanding of the impact of technology on what is taught and how it is taught. John Scully, one time chairman of Apple Computers, has called this time in history 'the turning of an era, the start of the 21st century renaissance'. He envisages this renaissance galvanised in much the same way as the last renaissance, that is, by technology. This time, however, it is not the technology of printing but of information. Computers and their capacity for simulation, inter-activeness, artificial intelligence and the use of hypermedia, mobile cellular telephone technology, fax machines, networks, global broadcasting, satellite-directed television and video cassettes all combine to put information ('knowledge' in the terms of yesteryear) in the hands of many. Educational institutions in a very real sense have lost their strategic advantage. As Graham Hills points out 'the interactive computer, with its compact video discs, shows itself to be a superior

vehicle for the transmission of facts, knowledge, ideas and, above all else, images.'

The consequence for educational institutions is nowhere better illustrated than by the phenomenal increase in the conference and educational video business. People like James Martin, the information technology guru, will charge large sums of money to speak at a conference and bring conference participants up to date on the latest thinking in the field. He does not need a university to provide him with an audience. He addresses global audiences (via satellite communication) and sells video tapes of the lecture to those who missed the satellite transmission. 'The habits of the scriptorium, essentially that of the students writing down the words of the professor, will not survive in competition with the more attractive methods of displaying text, equations, diagrams, and images now readily available to anyone with a disc-driven personal computer.' (Hills)

This is not to say there is no role for the teacher, but it is radically different. Educational institutions which do not face up to this reality will become redundant. They will be further impelled by the logic of the market place. Changes, as Graham Hills points out 'offer choices in subject material, in time frames, in spatial orientation, and in costs, all irresistible to our consumer society. It will be for the modern university to shape the options, to package and repack them for a variety of purposes including its own.'

The reality now lies essentially in what is taught and, even more important, how. The focus changes from content-dominated syllabi to process-dominated syllabi. We know that 'it is no longer possible to teach anybody all that they need to know for any career. There is no ration of knowledge that they can draw on throughout their careers and even more significantly, much of what they know will become obsolete within a relatively short period after graduating. This means that we must prepare all students, not just professional scholars, to embark on a lifetime of learning. Students today should master, as part of their basic education, the skills and tools of independent enquiry that characterises research. They must learn to work independently while also learning that knowledge does not reside privately in individual minds, or text books, or journals, or libraries or laboratories or data bases. Knowledge is integrated and resides in a complex web or network that intermeshes all these with experience.' (University of Natal, Planning Guidelines, 1993)

We also know that what Graham Hills says is true when he writes that 'every day, hundreds (sometimes thousands) of students still cram into lecture theatres and auditoria to copy down the words of a distant professor and regard his activity as the main basis of their education. It is a sad reflection not only of shortage of resources but of the slowness of the academic establishment to appreciate that knowledge transfer and knowledge accumulation are a less important aspect of the student's experience than acquiring the skills of learning, of understanding, and of presentation, none of which can be acquired in the lecture hall.

'Learning' is the key word in the new world, dominated as it is by changes and invention and new products being produced at a rate unprecedented in our previous history. Peter Senge writes about 'the learning organisation' making the point that change is so rapid and is such a key feature of modern life that unless an organisation consciously constitutes itself as a learning organisation it is consigning itself to Jurassic Park. Tom Peters says there are only two kinds of managers: the quick and the dead. He advises employers to employ only the curious (and it is no accident that word is inextricably linked with learning),

the zestful and the creative. he advises would-be employees to look for customers not bosses and points to many highly successful products or services that started in just that way (like the Apple computer that was first made in somebody's garage). All these things have a very big impact on what we teach our students, or rather what we require them to learn. All these things inform the curriculum reform project which is a major strategic initiative at the University of Natal.

This brings me to my next point. Some institutions have excellent research capacity. There is no question that the use of that capacity can contribute very substantially to the achievement of pressing national objectives. The research capabilities of some universities can play an important part in solving the pressing problems of the communities which we are bound to serve. Indeed, it is my contention that to ignore such problems would not only be an ethical failure, it would be an intellectual failure as well.

There are a host of policy issues that are going to require the skills and expertise of our academics to research and assist. If universities do not put a high priority on these activities, (not to the total exclusion of others, but nevertheless a high priority) they can hardly, I submit, be truly serving the community which sustains them and which finds itself in the crisis we all recognise as being of substantial proportions. We are also bound, I believe, to address ourselves to building research capacity in our regions and embarking on, and actively encouraging, collaborative and other projects to facilitate this.

Conclusion

In conclusion, ladies and gentlemen, I believe it is true to say that the issues we face mean that the management of tertiary institutions will have to 'manage change' on a scale unprecedented in our history — but in the end it is individual people who make things happen. Individuals will have to realise that each and everyone can make a difference. As individuals, and especially as individuals interested in tertiary education we need to ask ourselves what actions (actions that I would classify as affirmative actions in some cases) are we, as individuals, capable of implementing? Every one of us here this evening is capable of contributing to our efforts in this regard — whether it be acting as mentors, facilitators, donors, agents of change, teachers at every level (including explaining in whatever circles you mix, the issues which cloud understanding and become obstacles to change). As individuals, we are positively responsible for working towards the collective goal. Institutional effort will only work with individuals' effort — individuals who together make up the stakeholders in the future of tertiary education. We are truly in a race between education and disaster, ladies and gentlemen. This is not a time for hesitancy, it is a time for action. It is not a time for negativism, it is a time for enthusiastic and positive effort. It is not a time for competition, it is a time for co-operation and collaboration. We are rich in knowledge, ladies and gentlemen — let us not be poor in wisdom.

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